
2006 DOE SOLID-STATE LIGHTING WORKSHOP

February 1-3, 2006
Grosvenor Resort
Orlando, Florida

Workshop Agenda

February 1, 2006 – Basic Energy Science Contractor Meeting

7:30 Registration and Continental Breakfast

8:00 **Welcome**

Valy Vardeny, University of Utah
Tim Fitzsimmons, DOE
James Brodrick, DOE

8:20 **Keynote Address: Electrophosphorescent Organic Light Emitting Devices, and their Application to Solid-State Lighting**

Stephen Forrest, University of Michigan

9:00 **Interfaces of Polymer Electronic Devices**

Antoine Kahn, Princeton University

9:30 **Spin Transport in Organic Semiconductors**

Jing Shi, University of California, Riverside

10:00 Coffee Break

10:20 **Electronic Processes in Solid-State Organic Electronic Materials**

Darryl Smith, Los Alamos National Laboratory

10:50 **Transport Fundamentals in Crystalline Organic Semiconductor Devices**

Arthur Ramirez, Lucent Technologies

11:20 **Behavior of Charges, Excitons and Plasmons at Organic/Inorganic Interfaces**

Michael McGehee, Stanford University

11:50 **Design, Synthesis and Structuring of Functional Polymers and Dendrimers with Potential in Solid-State Lighting Technologies**

Jean Frechet, University of California and Lawrence Berkeley National Laboratory

12:20 Lunch

The DOE Nanoscience Centers and Solid-State Lighting (*Invited Talk*)

Paul Alivisatos, University of California, Berkeley and Lawrence Berkeley National Laboratory

2:00 **How to Dope Wide-Gap Materials: Basic Design Rules**

Alex Zunger, National Renewable Energy Laboratory

2:30 **Optical Properties of Semiconductors from Clusters to Nanostructures**

James Chelikowsky, University of Texas

3:00 **Luminescence, Structure, and Growth of Wide-Bandgap InGaN Semiconductors**

Stephen Lee, Sandia National Laboratories

3:30 *Break*

3:50 **Photonic Crystals and Negative Index Materials**

Costas Soukoulis, Iowa State University, Ames Laboratory

4:20 **Programming Function in Photonic Crystals**

Paul Braun, University of Illinois

4:50 **Biased Self-Assemblies in Block Copolymers and Nanorods** (*Invited Talk*)

Tom Russell, University of Massachusetts, Amherst

5:30 **Wrap-Up and Day 2 Preview**

Valy Vardeny, University of Utah

Tim Fitzsimmons, DOE

James Brodrick, DOE

5:40 **Adjourn**

6 - 8:30 **Poster Session and Reception, with hors d'oeuvre stations and cash bar**

Workshop Agenda

February 2, 2006 – DOE SSL Program Updates and Project Presentations

7:30 Continental Breakfast

8:00 Welcome

David Rodgers, DOE (invited)

8:20 Keynote Address

Alan Allan, Intel

8:50 Program Overview: Update on Program Progress

James Brodrick, DOE

9:10 Program Organization: Structure, Procedure, and Procurement Updates

C. Edward Christy, National Energy Technology Laboratory

9:30 Industry Perspective

Dale Work, Next Generation Lighting Industry Alliance

9:50 Basic Energy Science Program Update

Tim Fitzsimmons, DOE

10:10 Coffee Break

10:30 Parallel Reporting Sessions: Brief Presentations on DOE-Funded SSL Projects

(schedule of reports provided separately)

LED Project Reports

OLED Project Reports

12:30 Lunch

International Perspective: SSL R&D Patterns

Mark Huey, Strategic Perspectives

2:00 Parallel Reporting Sessions: Brief Presentations on DOE-Funded SSL Projects (continued)

LED Project Reports

OLED Project Reports

3:30 Break

3:50 Parallel Reporting Sessions: Brief Presentations on DOE-Funded SSL Projects (continued)

LED Project Reports

OLED Project Reports

5:00 Adjourn

6 - 8:00 Reception, with hors d'oeuvre stations and cocktails

Sponsored in part by the Next Generation Lighting Industry Alliance

Workshop Agenda

February 3, 2006 – SSL Commercialization Support Activities

7:30 *Continental Breakfast*

8:00 **Welcome: Overview of Day 3 Topics**

James Brodrick, DOE

8:10 **DOE SSL Commercialization Support Activities**

Marc Ledbetter, Pacific Northwest National Laboratory

8:40 **Lighting for Tomorrow Design Competition**

Kelly Gordon, Pacific Northwest National Laboratory

9:10 **ENERGY STAR Update**

Jeff McCullough, Pacific Northwest National Laboratory

9:40 **NEMA Solid-State Lighting Section Update**

Makarand Chipalkatti, Osram Sylvania

10:10 *Coffee Break*

10:30 **Lighting Designer Perspective**

Ted Ferreira, City Design Group

11:00 **Wrap-Up**

James Brodrick, DOE